WHAT IS CLAIMED:

1. A method of evaluating the efficacy of a therapeutic or prophylactic treatment of *Chlamydia*-induced disease, comprising the steps of:

a) rationally selecting a test mouse;

b) rationally selecting a dose of *Chlamydia* to be administered to said test mouse;

c) optionally, rationally selecting a feeding regimen with appropriate levels of arginine and feeding said test mouse according to said regimen;

d) optionally treating said test mouse with a NOS2 inhibitor;

e) administering *Chlamydia* to said test mouse;

f) administering said therapeutic or prophylactic treatment to said test mouse; and

g) assessing the severity of chlamydial disease in said test mouse,

wherein the severity of chlamydial disease in said mouse differs from the severity of chlamydial disease in a reference mouse to which said therapeutic or prophylactic treatment was not administered.

2. The method of claim 1, wherein said treatment is a prophylactic treatment and said step of administering said prophylactic treatment is performed before said step of administering *Chlamydia* to said mouse.

3. The method of claim 1, wherein the step of administering *Chlamydia* to said mouse comprises administering between $1 \times 10^5$ and $1 \times 10^6$ IFU of *Chlamydia* to said mouse intranasally.

4. The method of claim 1, wherein the step of rationally selecting a feeding regimen comprises testing said mouse strain for macrophage NO production, determining whether said mouse strain is a high NO responder or a low NO responder, and selecting a diet low in protein and arginine if said mouse strain is a high NO responder.

5. The method of claim 1, wherein said feeding regimen requires feeding said mouse a diet high in arginine following prophylactic treatment.

6. The method of claim 1, wherein said feeding regimen includes a food source having an arginine content between 0.1% and 3.0%.

7. The method of claim 1, wherein said NOS2 inhibitor is AG.

8. The method of claim 1, wherein the step of rationally selecting a test mouse comprises identifying a mouse strain which has a high level of NO response and selecting said test mouse from said mouse strain.

9. The method of claim 1, wherein the step of rationally selecting a dose of *Chlamydia* to be administered to said test mouse comprises evaluating the mouse strain from which said test mouse is selected to determine the $LD_{50}$ for said mouse strain when treated with *Chlamydia psittaci*.